

The logo of the Defense Logistics Agency (DLA) is centered in the background. It features a bald eagle with wings spread, perched atop a shield with vertical red and white stripes. The shield is set against a blue globe with white grid lines. A yellow banner curves around the globe with the words "DEFENSE LOGISTICS AGENCY" in black capital letters.

DLA Aviation

Industry Day 2016

Cost Analysis Overview



Agenda

- Price Analysis vs. Cost Analysis
- Certified vs. Uncertified
- Anatomy of an Adequate Proposal
- Questions/Comments
- Conclusion



Price Analysis

- FAR 15.404-1(b)(1-4)
- Price Analysis is a broad term meant to account for all buyer actions taken (i.e. competition, previous price comparison, commercial, catalog, or published prices, etc.) to reach a reasonable price decision
- Contracting officers **shall** obtain data other than certified cost or pricing data from the offeror or contractor for all acquisitions (including commercial item acquisitions), if that is the contracting officer's only means to determine the price to be fair and reasonable.



Defining Cost Analysis

- FAR 15.404-1(c)
- Cost analysis is the evaluation of any separate cost elements and profit
 - To determine fair & reasonable or cost realism
 - Compare proposed costs with projected cost trends based on current and historical cost or pricing data
 - This assumes reasonable economy and efficiency
- Detailed cost elements and profit evaluated individually
 - *For example:* Material, Labor, Overhead
- Reasonableness based on a thorough analysis of each cost element supporting data



Certified vs. Uncertified





Cost Analysis

- **Certified**

- FAR 15.403-4 (10 U.S.C. 2306a and 41 U.S.C. 254b); 2.101; DAAP 15.403-4
- Sole-source, Non-competitive awards over the Truth in Negotiations Act, or TINA (\$750,000)
- Data requires certification (FAR 15.406-2)
- Compliance with FAR 15.408, Table 15-2
- Proposal Adequacy Checklist is mandatory for sole-source proposals above TINA threshold



Cost Analysis

- Certified (continued)
 - Certified data is also required for:
 - A modification of a negotiated or sealed-bid contract involving a price adjustment of \$750,000 or more.
 - The award of a subcontract totaling \$750,000 or more (if prime/higher tiered contract needs to provide cost or pricing data).



Cost Analysis

- **Uncertified**

- FAR 15.403-3; 2.101; DAAP 15.403-3
- Award dollar values under TINA (\$750,000)
- Contracting Officers **shall** require submission of other than certified cost or pricing data to the extent necessary to determine a fair and reasonable price
- The data may be the same as certified data, but the certification is **not** required



Cost Analysis

Important

Regardless of certified/uncertified, the Contracting Officers are required to obtain whatever data is needed in order to determine fair and reasonable prices



Adequate Cost Proposal Submissions





Proposal Requirements

- What Is a Cost Proposal?
 - A breakdown of cost by cost element representing costs that are estimated to be incurred in the future or were already incurred
 - Examples of common cost elements include:
 - Material
 - Labor (hours and rates)
 - Indirect Costs (i.e. material and labor overhead & General & Administrative (G&A))
 - Profit
 - Note: This list is not all inclusive
 - Every proposed element must be **supported**



Proposal Requirements

- Identify and submit cost or pricing data (i.e., data that are verifiable and factual) **and** an explanation of the estimating process, including:
 - The judgmental factors applied (e.g. exchange rate) and the mathematical or other methods used in the estimate, including those used in projecting from known data; and
 - The nature and amount of any contingencies included in the proposed price
- Identify costs of work performed before submission of proposal



Contractor Name
City, State

Proposal Submitted in Response to RFP XXXXXX-XX-X-XXXX

<u>Element of Cost</u>	<u>Amount</u>
<u>Reference</u>	
Engineering Labor	\$452,151 Schedule 1
Manufacturing Labor	26,412 Schedule 1
Direct Labor Overhead @ 56.7%	271,345 Schedule 2
Material	113,175 Schedule 3
Material Handling Overhead @ 5.0%	<u>5,659</u>
Schedule 4	
Subtotal	\$868,742
G&A @ 8.0%	<u>69,499</u> Schedule 5
Estimated Cost	\$938,241
Profit @ 10.0%	<u>93,824</u>
Total Price	\$1,032,065
	=====



Labor Costs Guide

• Direct Labor

- Provide a time-phased (e.g., monthly, quarterly, etc.) breakdown by appropriate category of:
 - labor hours,
 - labor rates, and
 - labor cost
- Furnish basis for each estimate (historical experience, engineering estimates, learning curves, etc.)
- Provide rate calculation detail
- If labor is the allocation base for indirect costs, the labor cost should be summarized in order that the applicable overhead rate can be applied.



Labor Cost Guide (example)

2016 Engineering Labor Cost

<u>Labor Category</u>	<u>Rate/Hr</u>	<u>Hours</u>	<u>Total</u>
Program Manager	\$33.93	683	\$23,174
Senior Engineer	26.39	1,200	31,668
Junior Engineer	22.12	1,800	39,816
Engineering Aide	14.50	1,800	26,100
Technical Writer	16.00	-	-
Metallurgist	18.85	1,900	35,815
Draftsman	18.95	2,200	41,690
Total D/L - Eng	9,583	\$198,263	

2016 Manufacturing Labor Cost

<u>Labor Category</u>	<u>Rate/Hr</u>	<u>Hours</u>	<u>Total</u>
Fabrication	\$10.85	400	\$4,340
Assembly	9.25	-	-
Total D/Labor - Mfg	400	\$4,340	

Total Direct Labor \$202,603
=====

All hours proposed are based on historical costs, reference contract XXXXXX-XX-X-XXXXX, account 9271.

The supporting data showing the historical hours and the development of the proposed hours are in file

"XXXXXXXX.XX.X.XXXX Hours" and is available immediately upon request



Labor Costs Guide

- To support the proposed labor hours basis of estimate, these are some examples of data that should be provided with the cost proposal:
 - If previously made item provide:
 - Actual number of labor hours for production runs with associated quantities
 - If not previously made item provide:
 - Number of estimated labor hours and how they derived that number
 - Actual number of labor hours for similar item with associated quantities and details of how item is similar (include similar NSN or part number)
 - Detailed Engineering Estimate - Explanation of labor process, type of labor, complexity of item and basis of estimate. If hours are determined fair and reasonable, explain why. If not, establish own objective with basis of estimate.



Labor Costs Guide

- To support the proposed labor rates, these are some examples of data that should be provided with cost proposal:
 - Historical actual labor rates for each proposed labor category (i.e. payroll records, W2s, etc.)
 - Market research (i.e. Bureau of Labor Statistics)



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City, State

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Material Costs Guide

- Materials/Services
 - **Consolidated bill of material (BOM)**
 - Is a consolidated priced summary of individual material quantities included in the various tasks, orders, or contract line items being proposed
 - Must identify the item, source, quantity, price, and the basis for pricing (vendor quotes, invoice prices, etc.)
 - It also includes raw materials, parts, assemblies, and services to be produced or performed by others
 - **Submit BOM with cost proposal**
 - **At a minimum 80% (dollar value) of BOM should be supported with cost data**
 - **The 80% figure is calculated by sorting the material cost per part number in descending**



Bill of Material (Example)

Shock Absorber Bill of Material

<u>Support</u>	<u>Qty</u>	<u>Unit Price</u>	<u>Total</u>	<u>Notes</u>
(Note 3)				
Sheet Metal	1,600 sq. feet	\$25.00	\$40,000	
(1)				
Casings	750 pcs.	8.50	6,375	(2)
Plastic	7,500 pcs.	5.75	43,125	(1)
Springs	1,700 pcs.	4.00	6,800	(2)
Bolts	7,500 pcs.	2.25	<u>16,875</u>	(2)
Total Material			\$113,175	

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Explanatory Notes

(1) These prices are supported by multiple vendor quotes. The proposed prices are those

provided by the low bidder who was the ACME Corporation in their quotation dated

Mar 21, 2016. The quotations are included in file "XXXXXXX-XX-X-XXXX, Vendor

Quotations" that are available immediately upon request.

(2) These prices are supported by the 2016 spring edition of the Springs R Us Catalog. This

catalog is available for audit in the pricing office.



Material Costs Guide

- **Suppliers/Subcontracts:**
 - Provide price analyses of all supplier/subcontractor proposals, or cost analyses for all supplier/subcontracts when cost or pricing data are required to be submitted by the supplier/subcontractor, showing the basis for establishing source and reasonableness of price. (ref: FAR 15.404-3(b))
- **Support examples to include with cost proposal:**
 - PO history
 - Competitive vendor/supplier quotes
 - Cost analysis (inclusive of cost breakdown, support and analysis)
 - Long Term Agreements (LTAs) with price/cost analysis completed to determine reasonableness
 - Note: This list is not all inclusive



Material: Competition versus Sole-Source

- **Competitive Suppliers**

- Adequate competition exists when there are multiple independent manufacturer sources within a reasonable competitive range (ref: FAR 15.403-1(c)(1)(i))

- If proposed material costs are supported based on adequate competition, submit competitive quotes with cost proposal
 - If low bidder is not selected include rationale / justification



Material: Competitive versus Sole-Source

- **Sole-Source Suppliers**

- Non-competitive. Cost or pricing analysis may be required
 - Price analysis: Previous price comparison on same or similar part (ref: FAR 15.404-1(b)(2)(ii))
 - If cost analysis required, submit with cost proposal:
 - Cost breakdown (i.e. labor, material, G&A, etc.)
 - Support for proposed cost elements
 - Cost analysis completed by the prime



Material: Sole-Source over TINA (Certified)

- Sole-Source Suppliers/Subcontracts **exceeding** \$750,000: FAR15.404-3(b)(1)
 - Certified cost or pricing data from prospective sources is **required** along with analysis completed by prime contractor for reasonableness
 - Provide a summary of the cost analysis and a copy of the cost or pricing data submitted by the prospective source in support of each subcontract when required by FAR



Significant Increases in Material Prices

- Submit support to justify significant increases in material prices
- Support examples include:
 - PO history and current supplier quotes
 - Detailed explanation of any economic factors impacting current pricing (i.e. supply/demand impact, increase in energy prices, etc.)
 - This list is not all inclusive



Contractor Name
City, State

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Indirect Costs Guide

- **Indirect Costs** (FAR 15.408, Table 15-2 II.C.)
 - Indicate how you calculated and applied your indirect costs, including cost breakdowns.
 - Indicate the rates used and provide an appropriate explanation.
 - Show trends and budgetary data to provide a basis for evaluating the reasonableness of proposed rates.



Indirect Costs Guide

- **Indirect Costs Formula**

- Indirect Cost Pool divided by Indirect Cost Base = Indirect Rate

$$\frac{\text{Pool}}{\text{Base}} = \text{Indirect Rate}$$

- Fixed Cost - not dependent on the level of goods or services produced by the business
- Variable Cost - volume-related, paid per quantity produced



Indirect Costs Support (Example)

Contractor Name
City, State

Proposal Submitted in Response to RFP XXXXXX-XX-X-XXXX

Schedule 2

Base	Cost Element	2016	2017	2018
	Total			
	D/L - Engineering	\$198,263	\$148,838	\$105,050
		\$452,151		
	D/L - Manufacturing	4,340	8,776	13,296
		26,412		
Pool	Total Direct Labor	\$202,603	\$157,614	\$118,346
		\$478,563		

(Sched 1A) (Sched 1B) (Sched 1C)
***Manufacturing Overhead Example**

D/L Overhead Rate **56.7%** **56.7%** **56.7%**



Indirect Costs Support (Example Con't)

Budget for FY 2016 Labor Overhead
Actual Overhead Expenses for FY 2013 - 2015

<u>Overhead Expenses</u>	Budget (Note 2)	Actual Expenses (Note 1)		
	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Indirect Payroll \$225,320	\$260,000	\$255,120	\$280,450	
Payroll Taxes 197,308	228,000	223,615	245,538	
Vacation 130,846	120,000	117,692	129,231	
Holiday 95,192	110,000	107,885	118,462	
Sick Leave 43,269	50,000	49,038	47,832	
Pensions 147,981	171,000	167,712	184,154	
Employee Morale 4,210	5,000	4,530	5,960	
Entertainment 39,820	50,000	45,820	57,352	
Office Equipment 6,320	7,000	3,251	4,525	
Depreciation 4,925	5,000	5,125	5,075	
Subscriptions 1,475	1,500	1,485	1,450	



Indirect Costs Support (Example Con't)

Budget for FY 2016 Labor Overhead
Actual Overhead Expenses for FY 2013 - 2015

Budget Overhead Expenses 2013	<u>Actual Expenses (Note 1)</u>		
	2016	2015	2014
Net Allowable Expenses	\$1,324,500	\$1,299,454	
\$1,382,627	\$1,174,527		
	(Note 2)		
<u>Allocation Base</u>			
Direct Labor	<u>\$2,336,000</u>	<u>\$2,221,289</u>	<u>\$ 2,613,662</u>
<u>\$2,147,216</u>			
		(Note 3)	
Rate	56.7%	58.5%	52.9%
54.7%		=====	=====
=====	=====		
	(Note 4)		

Explanatory Notes

- (1) Provide the prior three years' actual overhead expense and allocation base in the same format as the budget for 2016. For the year 2015, actuals to date are provided.
- (2) The projected overhead expenses are based on the company's operating budget for 2016.



Proposal Requirements

Specific Elements

- **Other Costs** (FAR 15.408, Table 15-2 II.D.)
 - Identify all other costs by category not described in the prior slides (e.g., special tooling, travel, computer and consultant services)
 - Identify basis for pricing



Common Deficiencies

- **Certified**: Noncompliant with the requirements set forth in FAR 15.408, Table 15-2 and Proposal Adequacy Checklist
- **Uncertified**: Refusal to provide cost breakdown and adequate support based on dollar value
- Proposal not mathematically correct
 - Not proofread
 - Rounding errors
- Proposed costs are unsupported; supporting documentation outdated
- Failure to adequately describe basis or methodology used to compute proposed costs
- Indirect allocation bases not compliant with



Cost Proposal Package

Proposed
Total Price

Cost Breakdown
Elements:
Material Costs
Labor Costs
Overhead
G&A
Profit
Etc.

Proposed Cost
Elements Support:
i.e. historical labor
hours and rates,
competitive supplier
quotes, purchase
order history,
historical indirect
rates, etc.

**Package should
tell the story of
how proposed
prices were
established and
justified**



Proposed price cannot be justified by the Contracting Officer?

- Issue will be elevated
- As specified in Section 808 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 (Pub. L. 105-261), an offeror who does not comply with a requirement to submit data for a contract or subcontract in accordance with paragraph (a)(1) of this subsection is ineligible for award unless the HCA determines that it is in the **best interest** of the Government to make the award to that offeror, based on consideration of the following:
 - (i) The effort made to obtain the data.
 - (ii) The need for the item or service.
 - (iii) Increased cost or significant harm to the Government if award is not made.

(Ref: FAR 15.403-3(a)(4))



Resources

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Questions????